REMARKS

Claims 1-73 are pending in the application. Claims 1, 4, 16, 41, 44, 49, 51, 53, 57, 58, and claims 62-69 have been currently amended. Claims 70-73 are new claims.

Claim Rejections – 35 USC 101& 112

The Examiner rejects claims 1-69 under 35 U.S.C. 101 as not limited to practice in the technological arts and that the applicant does not specify an associated practical application. MPEP section 2106 concerned with computer related patentable subject matter, based on 35 U.S.C. 101, states:" **The subject matter sought to be patented must be a "useful" process, machine, manufacture, or composition of matter; i.e., it must have a practical application. The purpose of this requirement is to limit patent protection to inventions that possess a certain level of "real world" value, as opposed to subject matter that represents nothing more than an idea or concept, or is simply a starting point for future investigation or research(Brenner v. Manson, 383 U.S. 519, 528-36, 148 USPQ 689, 693-96 (1966); In re Ziegler, 992 F.2d 1197, 1200-03, 26USPQ2d 1600, 1603-06 (Fed. Cir. 1993)). Accordingly, a complete disclosure should contain some indication of the practical application for the claimed invention, i.e., why the applicant believes the claimed invention is useful".**

The present claim 1, as amended, defines: **"A method for automatic adaptive control of a predetermined multi-stage manufacturing process, said manufacturing process being defined by cells"**. The objective of the disclosed application is **"using a predetermined prediction model"** of a real manufacturing process, **"to associate settings for respective stages of said multi-stage process to respective outputs of said stages or said process"**. According to the embodiment disclosed in the present application, the base unit of the method is a cell. Each of the cells is associated with input data, control parameters and output data and each single cell represents one stage or multiple stages of the real manufacturing process. According to the method of the present application, the manufacturing process is predetermined by input data and control parameters and is automatically adaptive by combining the control parameters measured by actuators of the real manufacturing process, into the model.

The term: **"Strategic method"** has been removed from all the claims.

As indicated in the previous section, claim 1 of the present application cites a programming method for control, an application in its own right and which is further delimited in that it is an intrinsic part of a real process control system by modeling the process in a certain way and using measured data of the real system for optimizing the manufacturing process and causing the process to perform more effectively. It is therefore believed to fall into the category of 35 U.S.C. 101 as explained in MPEP section 2106.

Independent claim 41 cites: **"Graph-directed expertise-suggested interconnection cell relationship, defining a map referenced interconnection cell".** Disclosed in this claim is a user interface graphic description of the cells and their interconnections to a description of the manufacturing process. However, modeling the process in a certain way and using measured data of the real system for optimizing the manufacturing process and causing the process to perform more effectively, is the same as cited by claim 1. It is therefore believed to fall into the category of 35 U.S.C. 101 as explained in MPEP section 2106.

Independent claim 49 cites: **"An article of manufacture including a computer usable medium having a computer usable program code".** Disclosed in this claim is a manufacturing process that includes a programmable computer which can combine the disclosed manufacturing process with other tasks. However, modeling the process in a certain way and using measured data of the real system for optimizing the manufacturing process and causing the process to perform more effectively, is the same as cited by claim 1. It is therefore believed to fall into the category of 35 U.S.C. 101 as explained in MPEP section 2106.

Independent claim 51 cites: **"A computer comprising a program storage device readable by the computer, tangibly embodying a program executable by the computer for performing method steps for industrial process control".** According to this claim, the manufacturing control method can be executed with an added special purpose computer. However, modeling the process in a certain way and using measured data of the real system for optimizing the manufacturing process and causing the process to perform more effectively, is the same as cited by claim 1. It is therefore believed to fall into the category of 35 U.S.C. 101 as explained in MPEP section 2106.

Independent claim 53 cites: **"A computer system performing control of predetermined adaptive process".** According to this claim, the manufacturing control method can be executed with an added general purpose computer system. However, modeling the process in a certain way and using measured data of the real system for optimizing the manufacturing process and causing the process to perform more effectively, is the same as cited by claim 1. It is therefore believed to fall into the category of 35 U.S.C. 101 as explained in MPEP section 2106.

Independent claim 57 cites: **" First computer readable program code for causing computer to define a map referenced interconnection cell having therein a mapped plurality of graph directed, expertise suggested, interconnection cell relationship .....tied to the first computer readable program code, second computer readable program code for causing a computer to use the map referenced interconnection cell to designate at least one process control recipe for the industrial process".** According to this claim, a configuration of two computers is used, first computer for executing a graphic user interface format of the method and a second computer for controlling the manufacturing process. However, modeling the process in a certain way and using measured data of the real system for optimizing the manufacturing process and causing the process to perform more effectively, is the same as cited by claim 1. It is therefore believed to fall into the category of 35 U.S.C. 101 as explained in MPEP section 2106.

Claims 2-40, 42-48, 50, 52, 54-56 and 58-73 are dependable claims of the present application. Modeling the process in a certain way and using measured data of the real system for optimizing the manufacturing process and causing the process to perform more effectively, is the same as cited by independent claims 1, 41, 49, 51, 53, 57. It is therefore believed to fall into the category of 35 U.S.C. 101 as explained in MPEP section 2106.

It is thus respectively submitted that automatic programming for adaptive control of a multi-stage manufacturing process as defined by the amended pending claims 1-73, is sufficiently specific to qualify as a practical application rather than a field of endeavor.

Based on the arguments presented, we kindly request the examiner to reconsider the rejection of the claims of the present application.

All the matters raised by the Examiner are believed to have been dealt with and it is respectfully submitted that the application is now in order for acceptance.

Respectfully submitted,

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Encl.:
Extension of time (one month)
Request for Continued examination (RCE)